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# NOTES AND SYNONYMY OF SOME NEOTROPICAL SPHEX AND ISODONTIA DESCRIBED BY E. TASCHENBERG AND S. ROHWER

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The following notes are based primarily on Taschenberg type material generously lent by J. O. Husing of the Zoologisches Institut, Martin-Luther-Universitat, Halle, East Germany. In addition, a recent visit to the United States National Museum allowed the author to examine the Rohwer types in that Institution. I am designating lectotypes for the following Taschenberg species: Isodontia nigrocoerulea, Sphex argentinus and micans.

## ISODONTIA CYANIPENNIS (Fabricius)

Sphex cyanipennis Fabricius, 1793. Ent. Syst., 2:200 (Cayenne, French Guiana, type lost).

Sphex nigrocoerulea Taschenberg, 1869. Zeitsch. Ges. Naturw. Halle, 34:415 (Lectotype Q and paralectotype Q, Venezuela, present designation).

Isodontia bipunctata Rohwer, 1913. Proc. U.S. Nat. Mus., 44:452 (holotype  $\mathfrak{P}$ , Canal Zone, Panama). New synonymy.

J. van der Vecht (1961) suggested that Fabricius' cyanipennis is the same species described by Taschenberg as nigrocoerulea. However, Richards (1937) described a metallic blue Isodontia from a male colected in British Guiana, which may be a synonym of cyanipennis. If Richards' description of Isodontia bastiniana is accurate his species is distinct from nigrocoerulea. Richards states that the holotype of bastiniana lacks the prominent transverse bands of pale ciliia found on the gastral sternites of nigrocoerulea. In addition, the flagellomeres of bastiniana do not possess the spicules found on the flagellomeres of nigrocoerulea. A possibility

exists then that cyanipennis and bastiniana are synonymous and distinct from nigrocoerulea. All of the blue Isodontia that I have seen from the type locality of cyanipennis, Cayenne, are nigrocoerulea however, and it seems best to follow van der Vecht's interpretation of cyanipennis for the present.

In his original description, Taschenberg indicated that he was describing a male and a female, and the two syntypes sent to me are so labeled but both are females.

The type of *I. bipunctata* Rohwer is identical with Taschenberg's *nigrocoerulea*.

#### SPHEX TEPANECUS Saussure

Sphex tepanecus Saussure, 1867. Reise der Ost. Freg. Novara, Zool., 2:41. (holotype &, "Mextill," Museum d'histoire Naturelle, Geneva).

Sphex mexicana Taschenberg, 1869. Zeitsch. Ges. Naturw. Halle, 34:416 (holotype & Mexico).

Examination of Taschenberg's type proves that Kohl (1890) was correct in synonymizing mexicanus with tepanecus Saussure. Specimens of tepanecus that I have studied from Arizona and Texas differ from the type of mexicanus only slightly. The legs are completely black on the type but the United States examples have the front femora reddish brown beneath.

### SPHEX ARGENTINUS Taschenberg

Sphex argentina Taschenberg, 1869. Zeitsch. Ges. Naturw. Halle, 34:417 (lectotype 3, Mendoza, Argentina; paralectotype 2, Rozario, Argentina, present designation).

Willink (1951) correctly interpreted this species.

#### SPHEX MELANOPUS Dahlbom

Sphex melanopa Dahlbom, 1843, Hymenoptera Europaea, 1:27 (holotype 3, Brazil, Zoologisches Museum, Humboldt Universitat, Berlin.)

Sphex proxima Smith, 1856. Cat. Hym. Ins. Coll. Brit. Mus., 4:258 (holotype  $\, \circ \,$ , Brazil, Brititsh Museum Natural History).

 $Sphex\ ruficauda$  Taschenberg 1869. Zeitsch. Ges. Naturw. Halle, 34:418 (holotype  ${\Im}$  , "Amer. Merid.")

Both Kohl (1895) and Fernald (1931) studied Dahlbom's type of *melanopus* and arrived at the above synonymy. Dahlbom mentioned that his type was in the collection at Lund, but Fernald could not locate it there, and stated, as did Kohl, that it was in Berlin. Fernald also studied Smith's type of *proxima*.

This species exhibits a north-south clinal variation in the amount and color of thoracic pubescence. On specimens from Brazil, the appressed pubescence is copper or tarnished silver and is confined to a small spot behind the pronotal lobe and

above the meso- and meta-coxa, and to the scutal furrows and also a small spot at the side of the petiole socket. In these specimens the erect pubescence is dirty white. The area covered by the appressed pubescence increases on specimens found further north. In Venezuelan examples the pronotal lobe is covered with appressed silver pubescence and the posterior portion of the propodeum is entirely covered by appressed silver pubescence. Erect thoracic hair on these specimens is golden. In Panamanian examples the propodeum is completely covered and the thorax is extensively covered by appressed golden pubescence. Taschenberg's type of ruficauda agrees most closely with males from Venezuela.

#### SPHEX DORSALIS Lepeletier

Sphex dorsalis Lepeletier, 1845. Hist. Nat. Insect. Hym., 3:347 (holotype &, Cayenne, French Guiana, Museo di Zoologia, Universita di Torino (Turin).

Sphex singularis Smith, 1856. Cat. Hym. Insect. Brit. Mus., 4:261. (holotype 3, Honduras, British Museum Natural History).

Sphex micans Taschenberg, 1869. Zeitsch. Ges. Naturw. Halle, 34:419 (lectotype  $\mathfrak P$  and paralectotype  $\mathfrak P$ , Parana, Argentina, present designation).

Of the five female specimens sent to me for study, only two are clearly Taschenberg syntypes of *micans*. Taschenberg listed Parana, Mendoza, and Rio de Janeiro as type localities for the five females he described. Two of the specimens before me lack labels and a third is labeled Rozario. I am restricting the designation of lectotype to one of the two females labeled Parana.

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